

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: December 19, 1995  
Date Received: December 7, 1995  
Project: Metro Self Monitor, PO #M51573  
Date Samples Extracted: December 14, 1995  
Date Extracts Analyzed: December 18, 1995

**RESULTS FROM THE ANALYSIS OF THE PROCESS WATER SAMPLE  
FOR CHROMIUM, COPPER, NICKEL, ZINC**

**Samples Processed Using Method 3005**  
Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M51573	0.78	0.62	0.42	0.06
Method Blank	<0.05	<0.05	<0.05	<0.05

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**QUALITY ASSURANCE RESULTS  
FOR CHROMIUM, COPPER, NICKEL, AND ZINC**

Laboratory Code: 64664 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.78	0.82	5	0-20
Copper	mg/L (ppm)	0.62	0.63	2	0-20
Nickel	mg/L (ppm)	0.42	0.44	5	0-20
Zinc	mg/L (ppm)	0.06	0.05	18	0-20

Laboratory Code: 64664 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	0.78	92	93	80-120	1
Copper	mg/L (ppm)	5	0.62	91	90	80-120	1
Nickel	mg/L (ppm)	10	0.42	91	92	80-120	1
Zinc	mg/L (ppm)	5	0.06	93	93	80-120	0

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS	Acceptance Criteria
Chromium	mg/L (ppm)	5	102	80-120
Copper	mg/L (ppm)	5	104	80-120
Nickel	mg/L (ppm)	10	102	80-120
Zinc	mg/L (ppm)	5	100	80-120



KNJ AI  
12.07.95  
11:30

Send Report To:

SITE NO.	PROJECT NAME	PURCHASE ORDER #
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REMARKS	SAMPLE DISPOSAL INFORMATION
	<input checked="" type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	GERALD Thompson	ACW	12/7	11:05
Received by: 	KURT Johnson	FE & I	12/7	11:05
Relinquished by:				
Received by:				

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-8282

3012 16th Avenue West  
Seattle, WA 98119-2029  
FAX: (206) 283-5044

December 19, 1995

Gerry Thompson, Project Leader  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on December 7, 1995 from your Metro Self Monitor, PO #M51573 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson  
Chemist

keh  
Enclosures  
FAX: 382-7335  
ACU1219R.DOC

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

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James E. Bruya, Ph.D.  
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December 19, 1995

**INVOICE # 95ACU1219-1  
DUPLICATE COPY**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M51573: Results of testing requested by  
Gerry Thompson, Project Leader for material submitted on December 7,  
1995.

1 process water sample analyzed for  
Chromium, Copper, Nickel and Zinc  
@ \$65 per sample

\$ 65.00

Amount Due .....

\$ 65.00